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EXAMINER	
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ART UNIT	PAPER NUMBER
2626	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No.	Applicant(s)	
	10/755,623	LECOEUCHE, RENAUD J.	
	Examiner	Art Unit	
	MICHAEL C. COLUCCI	2626	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *12/02/2009*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-11,14-20 and 22* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-11,14-20 and 22* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments, see Remarks, filed 12/02/2009, with respect to the rejection(s) of claim(s) 19 under 35 USC 103(a) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Alpdemir US 20020035474 A1 (hereinafter Alpdemir) in view of Albayrak et al. US 6662163 B1 (hereinafter Albayrak) and further in view of Bangalore et al. US 20050135571 A1 (hereinafter Bangalore). Examiner has now clearly addressed claim 19. See rejection.

Re Remarks (pages 10-11 with respect to claim 1), Examiner believes that while giving claims their broadest reasonable interpretation in light of the supporting disclosure without importing limitations from the specification into the claims unnecessarily, Alpdemir teaches the limitations of claim 1. Consider the interpretation of "the set of controls includes attributes that define a selected order for execution of the plurality of question controls to generate the markup for an audible prompting of the plurality of questions in the selected order" in light of Fig. 16 of the present invention's Drawings. Alpdemir teaches various call flow scenarios that are subject to change depending on related responses from a user. Examiner believes that *an order list or suggestion that an additional prompt*

can be provided, which departs from a selected order is necessary as a means to track the conversation of a user and computer.

Alpdemir states that both the content and ordering of the content may change to suit local or region speech patterns, the goals of the call service, the demographics of the caller to the extent they can be determined, and numerous other objective and subjective or cultural factors ([0251]). Examiner believes this to be descriptive of the importance of the order in which questions and answers are presented.

Consider the following teachings of Alpdemir having two examples, where explicit deviations exist that change additional prompts presented to a user, The first prompt presented to the user immediately can diverge a conversation one of two ways as shown below.

In this embodiment, a new business manager/owner calls in and registers to be a member. She/he is asked to provide a credit card number for business information verification and services. Then, she/he gets prompted to verify the existing information and subscribe 3 months free of charge to the basic services where she is told she can record her promotional or informational message at the prompt. Then she/he is given a chance to review the existing business information in the Talk411 database, edit information if not correct, review and publish. Then she is given a chance to review and publish her promotional or

informational message and asked if she wants to learn about enhanced membership services. If she/he says yes, then she is briefly explained what those are and given a chance to subscribe. She/he is told she can always change her message, subscribe for additional services either on the telephone or on the Talk411.com web site.

First Exemplar Script for Consumer Call:

"Hello, welcome to Talk411, Bay Area's fresh information source"

"Please speak clearly. You can cut me off at any time, I won't get offended"

"If you are a member or want to become one, say `Yes`, if you want me to Find a business for you, say the name, or the type of the business"

ABC Pizza

"ABC Pizza is at 408-255-0000, say "connect", or say "more" for more info"

More

"There is no additional info. Do you want me to connect now or would you like me to recommend others in the area?"

Others

"Choice 1: Domino. Choice 2: Straw Hat with 10% off on any large Pizza, say your choice"

(CONDITIONAL STATEMENTS)

If answer is: **Straw Hat**

"You will need the following number to get your discount. Write it down while I connect. It is: SH1. Again, it is SH1. Thank you for calling us"

If answer is: **Domino's**

"All of Domino's Pizzas are made with real cheese and guaranteed to be hot on delivery! Thank you for calling us."

Exemplar Script for Business Call:

"Hello, welcome to Talk411, fresh info source for the Bay Area"

"Please speak clearly."

"If you are a member or want to become one say `Yes`, if you want me to find a business for you, say the name or the type of business"

I want to become a Member

"What is your business name or business phone number?"

ABC Pizza

"I do have some info for your business. Please answer my questions so I can process your membership. Your first three months are free of charge. We do require a major credit card so we can continue to provide you with uninterrupted service and give you the ability to order audio promotions and coupons any time any where on the phone or at the Talk411 web site. We will not charge your card until your 3-month trial period is complete. Please provide a MasterCard or a VISA credit card number followed with the expiration date"

xxxx xxxx xxxx xxxx and the expiration is 03/01

"What is the full name on the card?"

John Doe

"What is the zip code for the billing address?"

94102

"Please wait a moment while we process your information"

(may play an ad here)

"Thank you. Your password is Pass001. Please write it down. Again it is Pass001. Now you can dictate a short message that I will deliver to callers when they request your business information. You can change this message anytime here or at Talk411 web site by signing in with your password. Please dictate at the prompt or say Exit"

ABC Pizza is located right next to the Great Mall and we serve anywhere in the BayArea

"This is how I understood your dictation: "ABC Pizza is located right next to the Great Mall and we serve anywhere in the Bay Area". If this is not correct please repeat the message. If it is correct, say so" (after two tries, go to the Talk411 web site to type in your message).

Correct

"Congratulations. Now all callers who request your business info will hear your message. I can promote your business in other ways as well such as Category

Sponsorships and Audio Coupons. Please visit our web site at www.Talk411 .com and give me a call again. When you are ready to purchase additional services you can say "Promote" any time and I will step you through it. Thank ou for your business" ([0252]-[0287]).

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1-7, 11, 14, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Alpdemir US 20020035474 A1 (hereinafter Alpdemir) in view of Albayrak et al. US 6662163 B1 (hereinafter Albayrak) and further in view of Bangalore et al. US 20050135571 A1 (hereinafter Bangalore).

Re claim 1, Alpdemir teaches a computer readable storage medium having instructions, which when executed on a computer generate client side markup ([0140]) for a client in a client/server system, the instructions comprising:

a set of controls configured for use on a server remote from the client for defining a dialog and used to dynamically generate client side markup in accordance with the dialog ([0139]), the controls comprising a plurality of

question controls for generating markup related to audible prompting of a plurality of question ([0226]) and a plurality of answer controls for generating markup related to a grammar for recognition ([0169]), wherein the set of controls generate markup that is adapted to prioritize prompting of the plurality of questions ([0337-0339]) and generate markup related to a grammar for recognition as a function of responses from a user ([0143-0144]), wherein the set of controls includes attributes that define a selected order for execution of the plurality of question controls to generate the markup for an audible prompting of the plurality of questions in the selected order([0222 & 02223] & Fig. 5 ordered set of commands/responses);

a module, when executed on a process of a computer associated with the client, creates a dialog as a function of the controls, wherein the dialog follows a selected order of prompting of the plurality of questions and receiving input from a user as related to the order of the controls ([0217]), wherein the dialog departs from the selected order as a function of responses from the user ([0143-0144]), when at least one response includes an answer to the prompt that was given and additional information that is not an answer to the prompt that was given, wherein an additional prompt is then provided to the user concerning the additional information ([0132], *help* information) before returning to the selected order ([0250-0338] & Fig. 5, examples illustrating prompt and response in a dialog environment, that can start a users dialog over again).

However, Alpdemir fails to teach a client side markup for a client in a client/server system

Albayrak teaches an interactive voice response system includes a server and a set of mobile clients. The server and clients include RF transceivers for exchanging messages over an RF channel. Each mobile client includes a microphone, a speaker or headset, a processor and a voice browser. The voice browser interprets voice pages received from the server. Upon receiving a particular voice page from the server, the voice browser outputs via the speaker voice prompts specified by the voice page. A speech recognition engine used by the voice browser converts voice responses from a user into a text response. The voice browser then performs an action based on the text response. The action taken may be to request a new voice page from the server, or to continue to interpret the current voice page. The server preferably includes an HTTP server module for receiving and responding to requests for voice pages from the mobile clients in accordance with a predefined protocol. The mobile clients each include a text-to-speech module for converting text in a voice page into voice prompts, and a digitized speech module for playing digitized voice data representing other voice prompts. The mobile clients also include a speech recognition module for recognizing words or data string within a user's voice responses in accordance with a user specific voice file received from the server (Albayrak Col. 3 lines 3-27).

Further, Albayrak teaches that Hypertext refers to a collection of computer-readable text documents containing links, that is, location references. A browser utilizes the links to facilitate moving its attention between linked documents. A voice browser is similar to a graphical browser in that it is a

program that processes hypertext and presents the hypertext content in a specified format. The voice browser used in the preferred embodiment of this invention receives and outputs all information in the form of sound rather than having graphical input and output. The particular type of hypertext used in the preferred embodiment is based on VoiceXML. VoiceXML was designed by the VoiceXML Forum to create audio dialogs that feature digitized audio and speech recognition and to facilitate web-based development and content delivery. (Albayrak Col. 4 lines 11-39).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Alpdemir to incorporate a client side markup for a client in a client/server system as taught by Albayrak to allow for a server-client voice browsing system, wherein markup language is utilized to convert text to speech, particularly for a mobile client that can prompt a user wirelessly (Albayrak Col. 3 lines 3-27).

However, Alpdemir in view of Albayrak fails to teach obtaining a value for at least one field of a form

Bangalore teaches for example On Mapquest.RTM., to get driving directions, a user would click on the driving directions button 214. Other buttons include a maps button 212 and a road trip planner 216. FIG. 2B illustrates the forms to fill out for driving directions. On this webpage 230, there is a starting address 218 and a destination address 220. The information is filled into field 222 for a starting address and the field 224 for a destination address. The

present invention involves generating the necessary information drawn from the VoiceTone.sup.SM dialog to submit a request from the VoiceTone.sup.SM application to populate the necessary fields, for example in Mapquest, to obtain information. The interaction with the webpage 230 is all performed by VoiceTone.sup.SM or a process associated with VoiceTone.sup.SM inasmuch as the user is on a telephone call (Bangalore [0030]).

Further, Bangalore teaches [0057] FIG. 2C illustrates the response from the website when a user inputs a starting address 1600 Pennsylvania Avenue (the White House) to 50 Massachusetts Ave (Union Station, Washington DC). Information includes the total distance 1.62 miles, and total estimates time: 6 minutes. Detailed directions are provided 242 to the user and several options enable the user to receive the fastest route 252, the shortest route 244 or a route that avoids highways 246. The user can receive the directions via email 254 or the directions can be sent to a PCS phone 248. The form parser will analyze either off-line or dynamically each of the webpages illustrates in 2A, 2B and 2C to generate the appropriate prompts and input tags to receive via a voice dialog the information. As an example, after receiving via the voice dialog the "from" and "to" addresses, the service will receive the directions webpage shown in FIG. 2C. The form parser 106 will then identify the various pieces of information on the webpage 250 and dynamically adjust the dialog to ask the user questions such as: "Would you like to receive the directions via email or by phone?" If the response is by email, then the service receives the email address from the user or from another database or storage location and completes the process. The

service may provide the directions (steps 1-5 on the webpage 250) via the voice dialog (Bangalore [0057-0058]).

Additionally, Bangalore implements communication between a human and a machine to fill fields of a form, wherein Bangalore teaches the improvement of user information by implementing various prompts rather than assuming a user does not need any additional information ([0038-0052], particularly [0045-0050] diverging a bit from the topic of conversation to assist the user).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Alpdemir in view of Albayrak to incorporate obtaining a value for at least one field of a form as taught by Bangalore to allow for dynamically adjusting the dialog between a human and a computer (Bangalore [0057-0058]), wherein rather than assuming a user does not need any additional information, the system diverges from the topic of conversation to assist the user ([0038-0052], particularly [0045-0050], inquiring about a phone number to a location when a user did not inquire about a phone number to further assist before returning back to “is there anything else I can do for you today?”).

Re claims 2, Alpdemir teaches the computer readable storage medium of claim 1 wherein the module creates a dialog ([0220]) as a function of activated controls ([0143-0144]).

Re claim 3, Alpdemir teaches the computer readable storage medium of claim 2 wherein controls are activated as a function of responses from the user ([0143-0144]).

Re claims 4, Alpdemir teaches the computer readable storage medium of claim 3 wherein the set of controls includes an attribute to indicate the selected order that each of the controls will be activated ([0337-0339]).

Re claim 5, Alpdemir teaches the computer readable storage medium of claim 1 wherein one of the controls provides means for defining a confirmation for generating markup related to confirming that a recognized result is correct ([0191]).

Re claim 6, Alpdemir teaches the computer readable storage medium of claim 1 and further comprising a second set of controls for generating markup related to visual rendering on a client, wherein at least one of the first-mentioned set of controls is associated with at least one of the controls of the second set of controls ([0362-0363] & Fig. 11-12).

Re claims 7 and 14, Alpdemir teaches the computer readable storage medium of claim 1 wherein the module maintains information related to an order of responses received from the user, and wherein the module departs from the

selected order ([0337-0339]) to provide a prompt related to a previous [RLI0] response from the user in the information ([0143-0144]).

However, Alpdemir in view of Albayrak fails to teach providing a prompt related to a previous [RLI0] response from the user.

Bangalore teaches for example On Mapquest.RTM., to get driving directions, a user would click on the driving directions button 214. Other buttons include a maps button 212 and a road trip planner 216. FIG. 2B illustrates the forms to fill out for driving directions. On this webpage 230, there is a starting address 218 and a destination address 220. The information is filled into field 222 for a starting address and the field 224 for a destination address. The present invention involves generating the necessary information drawn from the VoiceTone.sup.SM dialog to submit a request from the VoiceTone.sup.SM application to populate the necessary fields, for example in Mapquest, to obtain information. The interaction with the webpage 230 is all performed by VoiceTone.sup.SM or a process associated with VoiceTone.sup.SM inasmuch as the user is on a telephone call (Bangalore [0030]).

Further, Bangalore teaches [0057] FIG. 2C illustrates the response from the website when a user inputs a starting address 1600 Pennsylvania Avenue (the White House) to 50 Massachusetts Ave (Union Station, Washington DC). Information includes the total distance 1.62 miles, and total estimates time: 6 minutes. Detailed directions are provided 242 to the user and several options enable the user to receive the fastest route 252, the shortest route 244 or a route that avoids highways 246. The user can receive the directions via email 254 or

the directions can be sent to a PCS phone 248. The form parser will analyze either off-line or dynamically each of the webpages illustrates in 2A, 2B and 2C to generate the appropriate prompts and input tags to receive via a voice dialog the information. As an example, after receiving via the voice dialog the "from" and "to" addresses, the service will receive the directions webpage shown in FIG. 2C. The form parser 106 will then identify the various pieces of information on the webpage 250 and dynamically adjust the dialog to ask the user questions such as: "Would you like to receive the directions via email or by phone?" If the response is by email, then the service receives the email address from the user or from another database or storage location and completes the process. The service may provide the directions (steps 1-5 on the webpage 250) via the voice dialog (Bangalore [0057-0058]).

Additionally, Bangalore implements communication between a human and a machine to fill fields of a form, wherein Bangalore teaches the improvement of user information by implementing various prompts rather than assuming a user does not need any additional information ([0038-0052], particularly [0045-0050] diverging a bit from the topic of conversation to assist the user).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Alpdemir in view of Albayrak to incorporate providing a prompt related to a previous [RLI0] response from the user as taught by Bangalore to allow for dynamically adjusting the dialog between a human and a computer (Bangalore [0057-0058], and Fig. 2A, voice to text input into fields on a form), wherein rather than assuming a user does not

need any additional information, the system diverges from the topic of conversation to assist the user ([0038-0052], particularly [0045-0050], inquiring about a phone number to a location when a user did not inquire about a phone number to further assist before returning back to “is there anything else I can do for you today?”).

Re claim 11, Alpdemir teaches a computer implemented method for performing recognition and/or audible prompting on a client in a client/server system, the method comprising:

defining a dialog with a set of controls for completing fields of a form, the set of controls comprising a plurality of question controls for generating audible prompts of questions and at least one answer control for generating markup related to a grammar used for recognition ([0139]), wherein the set of controls includes attributes defining a selected order of the question controls ([0226]) to prioritize prompting of the questions in the dialog and includes attributes for using a grammar for recognition as a function of responses from a user ([0337-0339]);

dynamically generating client side markup in accordance with the defined dialog on a server remote from the client ([0165]); and

creating the dialog on a client as a function of execution of the client side markup related to the controls using a processor of a computer, wherein the dialog follows a selected order of the question controls ([0217]) to obtain values from a user for fields of the form and includes storing a plurality of semantic items

that maintain information related to responses received from the user, wherein creating the dialog comprises:

providing a first prompt for a first question control in the selected order ([0309]), the first question control being associated with a first field of the form;

However, Alpdemir fails to teach a client side markup for a client in a client/server system

Albayrak teaches an interactive voice response system includes a server and a set of mobile clients. The server and clients include RF transceivers for exchanging messages over an RF channel. Each mobile client includes a microphone, a speaker or headset, a processor and a voice browser. The voice browser interprets voice pages received from the server. Upon receiving a particular voice page from the server, the voice browser outputs via the speaker voice prompts specified by the voice page. A speech recognition engine used by the voice browser converts voice responses from a user into a text response. The voice browser then performs an action based on the text response. The action taken may be to request a new voice page from the server, or to continue to interpret the current voice page. The server preferably includes an HTTP server module for receiving and responding to requests for voice pages from the mobile clients in accordance with a predefined protocol. The mobile clients each include a text-to-speech module for converting text in a voice page into voice prompts, and a digitized speech module for playing digitized voice data representing other voice prompts. The mobile clients also include a speech

recognition module for recognizing words or data string within a user's voice responses in accordance with a user specific voice file received from the server (Albayrak Col. 3 lines 3-27).

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Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Alpdemir to incorporate a client side markup for a client in a client/server system as taught by Albayrak to allow for a server-client voice browsing system, wherein markup language is utilized to convert text to speech, particularly for a mobile client that can prompt a user wirelessly (Albayrak Col. 3 lines 3-27).

However, Alpdemir in view of Albayrak fails to teach obtaining a value for at least one field of a form

receiving a user response that includes an answer to the first prompt indicative of a value for the first field of the form, wherein the user response includes additional information that is not an answer to the first prompt and is associated with one or more of the semantic items;

providing an additional prompt for a question control associated with a second field of the form based on the one or more semantic items associated with the additional information, wherein providing the additional prompt departs from the selected order of the question controls; and

after the user has provided an answer to the additional prompt, returning to the selected order of the question controls to provide a next prompt for a next question control in the selected order.

Bangalore teaches for example On Mapquest.RTM., to get driving directions, a user would click on the driving directions button 214. Other buttons include a maps button 212 and a road trip planner 216. FIG. 2B illustrates the forms to fill out for driving directions. On this webpage 230, there is a starting address 218 and a destination address 220. The information is filled into field 222 for a starting address and the field 224 for a destination address. The present invention involves generating the necessary information drawn from the VoiceTone.sup.SM dialog to submit a request from the VoiceTone.sup.SM application to populate the necessary fields, for example in Mapquest, to obtain information. The interaction with the webpage 230 is all performed by

VoiceTone.sup.SM or a process associated with VoiceTone.sup.SM inasmuch as the user is on a telephone call (Bangalore [0030]).

Further, Bangalore teaches [0057] FIG. 2C illustrates the response from the website when a user inputs a starting address 1600 Pennsylvania Avenue (the White House) to 50 Massachusetts Ave (Union Station, Washington DC). Information includes the total distance 1.62 miles, and total estimates time: 6 minutes. Detailed directions are provided 242 to the user and several options enable the user to receive the fastest route 252, the shortest route 244 or a route that avoids highways 246. The user can receive the directions via email 254 or the directions can be sent to a PCS phone 248. The form parser will analyze either off-line or dynamically each of the webpages illustrates in 2A, 2B and 2C to generate the appropriate prompts and input tags to receive via a voice dialog the information. As an example, after receiving via the voice dialog the "from" and "to" addresses, the service will receive the directions webpage shown in FIG. 2C. The form parser 106 will then identify the various pieces of information on the webpage 250 and dynamically adjust the dialog to ask the user questions such as: "Would you like to receive the directions via email or by phone?" If the response is by email, then the service receives the email address from the user or from another database or storage location and completes the process. The service may provide the directions (steps 1-5 on the webpage 250) via the voice dialog (Bangalore [0057-0058]).

Additionally, Bangalore implements communication between a human and a machine to fill fields of a form, wherein Bangalore teaches the improvement of

user information by implementing various prompts rather than assuming a user does not need any additional information ([0038-0052], particularly [0045-0050] diverging a bit from the topic of conversation to assist the user).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Alpdemir in view of Albayrak to incorporate obtaining a value for at least one field of a form, receiving a user response that includes an answer to the first prompt indicative of a value for the first field of the form, wherein the user response includes additional information that is not an answer to the first prompt and is associated with one or more of the semantic items, providing an additional prompt for a question control associated with a second field of the form based on the one or more semantic items associated with the additional information, wherein providing the additional prompt departs from the selected order of the question controls, and after the user has provided an answer to the additional prompt, returning to the selected order of the question controls to provide a next prompt for a next question control in the selected order as taught by Bangalore to allow for dynamically adjusting the dialog between a human and a computer (Bangalore [0057-0058], and Fig. 2A, voice to text input into fields on a form), wherein rather than assuming a user does not need any additional information, the system diverges from the topic of conversation to assist the user ([0038-0052], particularly [0045-0050], inquiring about a phone number to a location when a user did not inquire about a phone number to further assist before returning back to “is there anything else I can do for you today?”).

Re claim 19, Alpdemir teaches a computer-implemented system comprising:

a set of controls used on a server remote from a client for defining a dialog, the set of controls configured to generate client side markup in accordance with the dialog ([0139]), wherein the set of controls comprises a plurality of question controls for generating markup related to audible prompting of a plurality of questions ([0226]) and at least one answer control for generating markup related to a grammar for recognition ([0169]), wherein a selected order for the set of controls is defined by an author to prioritize prompting of the plurality of questions ([0337-0339]);

a server module, which when executed on the server, generates client side markup in accordance with the dialog;

a client module executed on a processor of a computing device associated with the client using the client side markup to create the dialog as a function of the set of controls and the selected order ([0217]), wherein the client module maintains a plurality of semantic items in an ordered list to store information related to responses received from the user for the question controls ([0250-0338] & Fig. 5, examples illustrating prompt and response in a dialog environment, that can start a users dialog over again);

wherein the client module follows the selected order until a response is received from a user that includes additional information that is not an answer to a prompt that was given ([0252]-[0287], various answers and questions

dependent on previous answers and questions), wherein the client module stores the additional information in one or more semantic items in the ordered list ([0250-0338] & Fig. 5, examples illustrating prompt and response in a dialog environment, that can start a users dialog over again);

wherein the client module subsequently accesses the ordered list to depart from the selected order by providing an additional prompt for the additional information to obtain ([0252]-[0287], various answers and questions dependent on previous answers and questions), from the user, a value for a field of the form before returning to the selected order ([0250-0338] & Fig. 5, examples illustrating prompt and response in a dialog environment, that can start a users dialog over again).

However, Alpdemir fails to teach a client side markup for a client in a client/server system

Albayrak teaches an interactive voice response system includes a server and a set of mobile clients. The server and clients include RF transceivers for exchanging messages over an RF channel. Each mobile client includes a microphone, a speaker or headset, a processor and a voice browser. The voice browser interprets voice pages received from the server. Upon receiving a particular voice page from the server, the voice browser outputs via the speaker voice prompts specified by the voice page. A speech recognition engine used by the voice browser converts voice responses from a user into a text response. The voice browser then performs an action based on the text response. The

action taken may be to request a new voice page from the server, or to continue to interpret the current voice page. The server preferably includes an HTTP server module for receiving and responding to requests for voice pages from the mobile clients in accordance with a predefined protocol. The mobile clients each include a text-to-speech module for converting text in a voice page into voice prompts, and a digitized speech module for playing digitized voice data representing other voice prompts. The mobile clients also include a speech recognition module for recognizing words or data string within a user's voice responses in accordance with a user specific voice file received from the server (Albayrak Col. 3 lines 3-27).

Further, Albayrak teaches that Hypertext refers to a collection of computer-readable text documents containing links, that is, location references. A browser utilizes the links to facilitate moving its attention between linked documents. A voice browser is similar to a graphical browser in that it is a program that processes hypertext and presents the hypertext content in a specified format. The voice browser used in the preferred embodiment of this invention receives and outputs all information in the form of sound rather than having graphical input and output. The particular type of hypertext used in the preferred embodiment is based on VoiceXML. VoiceXML was designed by the VoiceXML Forum to create audio dialogs that feature digitized audio and speech recognition and to facilitate web-based development and content delivery. (Albayrak Col. 4 lines 11-39).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Alpdemir to incorporate a client side markup for a client in a client/server system as taught by Albayrak to allow for a server-client voice browsing system, wherein markup language is utilized to convert text to speech, particularly for a mobile client that can prompt a user wirelessly (Albayrak Col. 3 lines 3-27).

However, Alpdemir in view of Albayrak fails to teach obtaining a value for at least one field of a form

Bangalore teaches for example On Mapquest.RTM., to get driving directions, a user would click on the driving directions button 214. Other buttons include a maps button 212 and a road trip planner 216. FIG. 2B illustrates the forms to fill out for driving directions. On this webpage 230, there is a starting address 218 and a destination address 220. The information is filled into field 222 for a starting address and the field 224 for a destination address. The present invention involves generating the necessary information drawn from the VoiceTone.sup.SM dialog to submit a request from the VoiceTone.sup.SM application to populate the necessary fields, for example in Mapquest, to obtain information. The interaction with the webpage 230 is all performed by VoiceTone.sup.SM or a process associated with VoiceTone.sup.SM inasmuch as the user is on a telephone call (Bangalore [0030]).

Further, Bangalore teaches [0057] FIG. 2C illustrates the response from the website when a user inputs a starting address 1600 Pennsylvania Avenue

(the White House) to 50 Massachusetts Ave (Union Station, Washington DC). Information includes the total distance 1.62 miles, and total estimates time: 6 minutes. Detailed directions are provided 242 to the user and several options enable the user to receive the fastest route 252, the shortest route 244 or a route that avoids highways 246. The user can receive the directions via email 254 or the directions can be sent to a PCS phone 248. The form parser will analyze either off-line or dynamically each of the webpages illustrates in 2A, 2B and 2C to generate the appropriate prompts and input tags to receive via a voice dialog the information. As an example, after receiving via the voice dialog the "from" and "to" addresses, the service will receive the directions webpage shown in FIG. 2C. The form parser 106 will then identify the various pieces of information on the webpage 250 and dynamically adjust the dialog to ask the user questions such as: "Would you like to receive the directions via email or by phone?" If the response is by email, then the service receives the email address from the user or from another database or storage location and completes the process. The service may provide the directions (steps 1-5 on the webpage 250) via the voice dialog (Bangalore [0057-0058]).

Additionally, Bangalore implements communication between a human and a machine to fill fields of a form, wherein Bangalore teaches the improvement of user information by implementing various prompts rather than assuming a user does not need any additional information ([0038-0052], particularly [0045-0050] diverging a bit from the topic of conversation to assist the user).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Alpdemir in view of Albayrak to incorporate obtaining a value for at least one field of a form as taught by Bangalore to allow for dynamically adjusting the dialog between a human and a computer (Bangalore [0057-0058]), wherein rather than assuming a user does not need any additional information, the system diverges from the topic of conversation to assist the user ([0038-0052], particularly [0045-0050], inquiring about a phone number to a location when a user did not inquire about a phone number to further assist before returning back to "is there anything else I can do for you today?").

4. Claims 8-10, 15-18, and 20-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Alpdemir US 20020035474 A1 (hereinafter Alpdemir) in view of Albayrak et al. US 6662163 B1 (hereinafter Albayrak) and Bangalore et al. US 20050135571 A1 (hereinafter Bangalore) and further in view of Takebayashi et al. US 5357596 A (hereinafter Takebayashi).

Re claim 8, Alpdemir teaches the computer readable storage medium of claim 7 wherein the set of controls includes an attribute to indicate whether a response to a prompt will be maintained in the information related to the order of responses received from the user ([0337-0339]).

Re claims 9, 16 and 21, Alpdemir teaches the computer readable storage medium of claim 8 wherein module maintains the information related to an order of responses ([0337-0339]) received from the user as a stack.

However, Alpdemir in view of Albayrak and Bangalore fails to teach an order of responses received from the user as a stack

Takebayashi teaches an order table shown in FIG. 7 indicates the content of the order made by the input speech as understood by the system at each moment during the order taking operation, in a form of an order list similar to the ORDER TABLE frame of the semantic response representation, and this order table is to be updated according to the ACT frame and the ORDER TABLE frame of the semantic utterance representation supplied from the speech understanding unit 11. On the other hand, the past order table shown in FIG. 8 indicates the order table at a time of an output of the previous system response, i.e., the content of the order taken up to an output of the previous system response. This past order table of FIG. 8 is utilized as the dialogue history indicative of the change of the order table in the course of the order taking operation (Takebayashi Col. 11 lines 33-51 & Fig. 7-8).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Alpdemir in view of Albayrak and Bangalore to incorporate an order of responses received from the user as a stack as taught by Takebayashi to allow for the logging of data history, wherein the order and previous responses are stored for the dialog manager, wherein changes in user responses can be monitored for an improved recognition

scheme (Takebayashi Col. 11 lines 33-51 & Fig. 7-8, wherein ordered data in memory is construed to be functionally equivalent to a stack).

Re claims 10 and 20, Alpdemir in view of Albayrak and Bangalore fails to teach the computer readable storage medium of claim 9 wherein the stack is of selected length such that the oldest information related to the oldest received response is removed when information is received related to the latest response from the user.

Takebayashi teaches an order table shown in FIG. 7 indicates the content of the order made by the input speech as understood by the system at each moment during the order taking operation, in a form of an order list similar to the ORDER TABLE frame of the semantic response representation, and this order table is to be updated according to the ACT frame and the ORDER TABLE frame of the semantic utterance representation supplied from the speech understanding unit 11. On the other hand, the past order table shown in FIG. 8 indicates the order table at a time of an output of the previous system response, i.e., the content of the order taken up to an output of the previous system response. This past order table of FIG. 8 is utilized as the dialogue history indicative of the change of the order table in the course of the order taking operation (Takebayashi Col. 11 lines 33-51 & Fig. 7-8).

Further, Takebayashi teaches the confirmation for the partial change of the order such as addition, replacement, and deletion is carried out by using only the speech response and the text data of the speech response. However, the

visual information may also be used for the confirmation of the partial change of the order. In such a case, the display of the content visualizing image indicating the entire order may be interrupted temporarily, if desired. (Takebayashi Col. 27 lines 8-16).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Alpdemir in view of Albayrak and Bangalore to incorporate a stack that is of selected length such that the oldest information related to the oldest received response is removed when information is received related to the latest response from the user as taught by Takebayashi to allow for the logging of data history, wherein the order and previous responses are stored for the dialog manager and older data is removed as the most recent response is received, wherein changes in user responses can be monitored for an improved recognition scheme (Takebayashi Col. 11 lines 33-51 & Fig. 7-8, wherein ordered data in memory is construed to be functionally equivalent to a stack).

Re claim 15, Alpdemir teaches the computer implemented method of claim 14 wherein the set of controls includes an attribute to indicate whether a response to a prompt will be maintained in the information related to the order of responses received from the user ([0337-0339]), and wherein creating the dialog includes maintaining information related to an order of responses received from the user as a function of the corresponding attribute for a prompt ([0226]).

Re claim 18, computer implemented method of claim 14, wherein defining a dialog includes logic for modifying the maintained information related to an order of responses received from the user([0337-0339]), and wherein creating the dialog includes modifying the maintained information pursuant to the logic ([0213).

Re claim 17, Alpdemir in view of Albayrak and Bangalore fails to teach the computer implemented method of claim 16, wherein maintaining the ordered list comprises maintaining the ordered list in a stack

Takebayashi teaches an order table shown in FIG. 7 indicates the content of the order made by the input speech as understood by the system at each moment during the order taking operation, in a form of an order list similar to the ORDER TABLE frame of the semantic response representation, and this order table is to be updated according to the ACT frame and the ORDER TABLE frame of the semantic utterance representation supplied from the speech understanding unit 11. On the other hand, the past order table shown in FIG. 8 indicates the order table at a time of an output of the previous system response, i.e., the content of the order taken up to an output of the previous system response. This past order table of FIG. 8 is utilized as the dialogue history indicative of the change of the order table in the course of the order taking operation (Takebayashi Col. 11 lines 33-51 & Fig. 7-8).

Further, Takebayashi teaches the confirmation for the partial change of the order such as addition, replacement, and deletion is carried out by using only

the speech response and the text data of the speech response. However, the visual information may also be used for the confirmation of the partial change of the order. In such a case, the display of the content visualizing image indicating the entire order may be interrupted temporarily, if desired. (Takebayashi Col. 27 lines 8-16).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Alpdemir in view of Albayrak and Bangalore to incorporate maintaining the ordered list comprises maintaining the ordered list in a stack as taught by Takebayashi to allow for the logging of data history, wherein the order and previous responses are stored for the dialog manager and older data is removed as the most recent response is received, wherein changes in user responses can be monitored for an improved recognition scheme (Takebayashi Col. 11 lines 33-51 & Fig. 7-8, wherein ordered data in memory is construed to be functionally equivalent to a stack).

Re claim 22, Alpdemir teaches the system of claim 20 wherein the ordered list is indicative of a list of semantic items ([0250-0338] & Fig. 5, examples illustrating prompt and response in a dialog environment, where the best matching data to a user response is selected from a set of data).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael C. Colucci whose telephone number is (571)-270-1847. The examiner can normally be reached on 9:30 am - 6:00 pm, Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richemond Dorvil can be reached on (571)-272-7602. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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